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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/891,517	06/27/2001	Ryuichiro Kurane	210352US0X	8807

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EXAMINER

ZEMAN, MARY K

ART UNIT PAPER NUMBER

1631

DATE MAILED: 09/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/891,517

Applicant(s)

KURANE ET AL.

Examiner

Mary K Zeman

Art Unit

1631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-54 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: _____

Election/Restrictions

Claims 12, 14-22, 29-36, and 40-54 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from another multiple dependent claim. See MPEP § 608.01(n).

The claims have been placed in groups to the best of the examiner's ability to decode the improper dependencies of the multiplicity of claims. Applicant is advised to review the claims, and appropriately amend the claims in the group elected.

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-4 in total, claims 12, 14-17, 29-36 each in part, drawn to probe set 1, as described in claim 1, and kits comprising those probes classified in class 536, subclass 23.1.
- II. Claims 5-7 in total, claims 11, 12, 14-17, 29-36 each in part, drawn to probe set 2, as described in claim 5, and kits comprising those probes, classified in class 536, subclass 23.1.
- III. Claims 8-10 in total, claims 11, 12, 14-17, 29-36 each in part, drawn to probe set 3, as described in claim 8, and kits comprising those probes, classified in class 536, subclass 23.1.
- IV. Claim 13 in total, claims 14-17, 29-36 each in part, drawn to probe set 4, as described in claim 13, and kits comprising those probes, classified in class 536, subclass 23.1.
- V. Claim 18 in total, claim 48 in part, drawn to a first hybridization method, measuring intensity of fluorescence, classified in class 435, subclass 6.
- VI. Claim 19 in total, claims 40 in part, drawn to a second hybridization method, measuring a change in fluorescence, classified in class 435, subclass 6.
- VII. Claims 20-21 in total, claims 40 in part, drawn to a third hybridization method, wherein high-order structures are degraded, classified in class 435, subclass 6.

- VIII. Claims 22, 41 in total, drawn to a fourth hybridization method, determining polymorphism or mutation measuring a change in intensity of fluorescence classified in class 435, subclass 6.
- IX. Claims 23-28, 42 in total, drawn to a fifth method, PCR-based, classified in class 435, subclass 92.2+.
- X. Claims 37-39 in total, drawn to a sixth method, hybridization-based, using an array of a previous claim, classified in class 435, subclass 6.
- XI. Claim 43 in total, drawn to a seventh method, PCR-based, classified in class 435, subclass 92.2+.
- XII. Claim 44 in total, drawn to an eighth method, PCR-based, classified in class 435, subclass 6.
- XIII. Claim 45 in total, claims 47 in part, drawn to a ninth method, PCR-based, classified in class 435, subclass 92.2+.
- XIV. Claim 46 in total, claims 47 in part, drawn to a tenth method, PCR-based (qtPCR), classified in class 435, subclass 92.2+.
- XV. Claims 48-52, 54, drawn to data analysis methods, classified in class 707, subclass 50.
- XVI. Claim 53, drawn to an eleventh method, a PCR method for analyzing a melting curve classified in class 435, subclass 92.2+.

The inventions are distinct, each from the other because of the following reasons:

Each of the product groups I-IV are independent and distinct, each from the other as each groups has differing physical, chemical, and biological features that are substantially non-overlapping and would require searching in differing art areas. As such, the search of 4 separate product groups would pose an undue search burden upon the examiner if not restricted.

Each of the method groups V-XVI are independent and distinct, each from the other, as each method recites differing steps, has differing goals, and uses differing products to differing ends. Each method would require a differing search strategy in non-overlapping areas. As such, the search of 11 separate methods would pose an undue search burden upon the examiner if not restricted.

Inventions I-IV and V-XVI are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case each product has a multiplicity of uses as illustrated by the variety of methods being claimed for those products. The probes could also be used in diagnostic applications and for cloning sequences.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary K Zeman whose telephone number is (703) 305-7133.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, can be reached at (703) 308-4028.

The Official fax number for this Art Unit is: (703) 872-9306

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC1600 Receptionist whose telephone number is (703) 308-0196.

mkz
9/5/03


MARY K. ZEMAN
PRIMARY EXAMINEE
AU/631